### Shaw Environmental & Infrastructure, Inc.



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A World of Solutions™

November 23, 2009 Project #: 1009644004 - 04

Mr. Mark Lewis Connecticut Department of Environmental Protection 79 Elm Street Hartford, CT 06106

Addendum to Remedial Action Plan - AOC 1, AOC 5, AOC 9 and AOC 14 Subject:

> Closure Plan Part 1 CSA Montville Generating Station Montville, Connecticut

Dear Mr. Lewis:

As previously discussed, on behalf of Montville Power LLC, Shaw has prepared this addendum to clarify the closure procedure of the Container Storage Area (CSA) at the subject site. Closure of the CSA was originally detailed in a Remedial Action Plan (RAP) prepared by Shaw and dated June 17, 2009 and for which public notice activities were completed on August 3, 2009. This addendum was prepared at the recommendation of Dave Ringquist of CTDEP in order to meet the intent of the RCRA Closure Plan Part 1 (CPP 1). CTDEP and EPA had previously indicated that the CSA could be closed under the RAP. During a meeting on September 3, 2009 attended by NRG, CTDEP, EPA, and Shaw, it was agreed to that a brief RAP addendum would be prepared to address any needed specifics to close the CSA and that CTDEP would provide timely review and approval of the addendum. The June 17, 2009 RAP and this addendum together constitute CPP 1 and follow the "Draft RCRA Closure Plan Guidance for TSD Facilities, CSAs, and Tank Systems" prepared by CTDEP dated November 1993. Please review and approve this addendum by December 14, 2009.

The CSA is located in the waste water treatment building in the middle of the site (Figure 1). The CSA was historically utilized as a RCRA storage area for drums containing hazardous wastes prior to shipment off site. RCRA wastes have not been stored in the CSA in over a year. The CSA consists of a 30-foot by 10-foot self-contained indoor storage facility with concrete secondary containment which has a storage capacity of 48, 55-gallon drums. There have been no recorded spills or releases at the CSA.

#### **CONSTITUENTS OF CONCERN** Α.

Shaw has created a list of constituents of concern (COCs) based upon a detailed review of facility records on March 25, 2009, which summarized waste stored in the CSA. The comprehensive list includes semivolatile organic compounds (SVOC) acid, base and neutral list by EPA Method 8270 (mass and SPLP),

volatile organic compounds (VOC) by EPA 8260, 13 priority pollutant metals by EPA 6000/7000 (mass and SPLP), extractable petroleum hydrocarbons (ETPH) and polycyclic biphenyls (PCBs) by EPA Method 8082.

On March 25, 2009, a detailed inspection of the CSA was completed by Shaw in accordance with the June 17, 2009 RAP. This included an inspection of the concrete floor, the 8-inch high and 6-inch wide concrete berm along the north side of the CSA, and the concrete walls on the south, west and east sides of the CSA. The concrete floor appeared to be in good condition with the exception of a small section of chipped concrete floor in the southeast area of the CSA by the stair case and some mineral staining noted on the floor in the southwest and west areas of the CSA. The staining is likely due to groundwater infiltration along the piping that enters the CSA at the southwest corner of the building and runs along the west side of the CSA. This piping is approximately 2-feet above the concrete floor and is associated with the waste water treatment plant. One small surficial crack was noted in the southwest vertical column of the CSA starting at the base of the column. In addition, one capped pipe was observed at the east side of the CSA. This pipe vertically penetrates the CSA floor, is cut approximately 5-inches above the floor and appears to be rusted. According to NRG, the destination and use of this pipe is unknown. A sketch of the CSA is included as **Figure 2**. Photos of the CSA are provided as **Attachment 1**.

#### B. IDENTIFY ALL POTENTIAL HUMAN EXPOSURE PATHWAYS

There are no known significant potential human exposure pathways per the CPP 1 Draft Guidance. However, current site workers may come into occasional contact with the CSA concrete briefly, several times a year. An Environmental Land Use Restriction (ELUR) will be placed on the entire property and the new structures associated with a facility repowering project will potentially be built over the CSA area after assessment and any required remediation. During assessment and remediation (if any), proper PPE will be used to limit worker potential exposure pathways per the site-specific Health & Safety Plan.

#### C. IDENTIFY THE PRESENCE/ABSENCE OF CONTAMINATION REQUIRING REMEDIATION

Based on the recent inspection and record review the following has been determined:

- There were no obvious stains on the CSA floor with the exception of mineral staining from water in the southwest and west areas of the CSA.
- The integrity of the concrete floor appears to be in good condition with the exception of a small section of chipped concrete floor in the southeast area of the CSA.
- The integrity of the concrete walls and berm appears to be in relatively good condition with the
  exception of a small surficial crack in the vertical column located in the southwest corner of the
  CSA.
- A capped pipe was observed in the east side of the CSA. This pipe vertically penetrates the CSA floor and the pipe destination and use is unknown.

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Shaw proposes to clean the CSA floor and collect concrete chip samples as described below:

- The floor and secondary containment inside of the CSA will be steam cleaned and wash water will be collected by a wet/dry vacuum cleaner during cleaning activities. The wash water will be drummed and characterized for proper disposal. The wash water will be analyzed for the following: VOCs, SVOCs, ETPH, 13 priority pollutant metals, PCBs, reactivity, corrosivity, and ignitability.
- 2. The concrete floor will be thoroughly inspected for cracks, the integrity of the floor coating, and potential staining. A detailed, scaled sketch and photographs will document the condition of the area.
- 3. Concrete chip samples will be collected from locations based on a regular pattern. Based on the size of the CSA four samples will be collected (approximately one sample/70 square feet). Additional samples or a bias sampling may be completed to assess suspect areas (e.g., location with cracks or staining). In addition, two concrete chip samples will be collected from a location where no wastes were stored to assess background. The samples will be analyzed for the complete list of COCs generated for the CSA.

Shaw also proposes collecting soil samples beneath the concrete in the CSA. These samples will be collected to assess the potential for soil impacts from materials stored in the CSA. The concrete will be cored at four locations to access sub-slab soil. The soil borings will be advanced to a maximum depth of 5 feet below grade and two samples will be collected from each sample location. The soil samples will be analyzed for the established list of COCs described in Section A above.

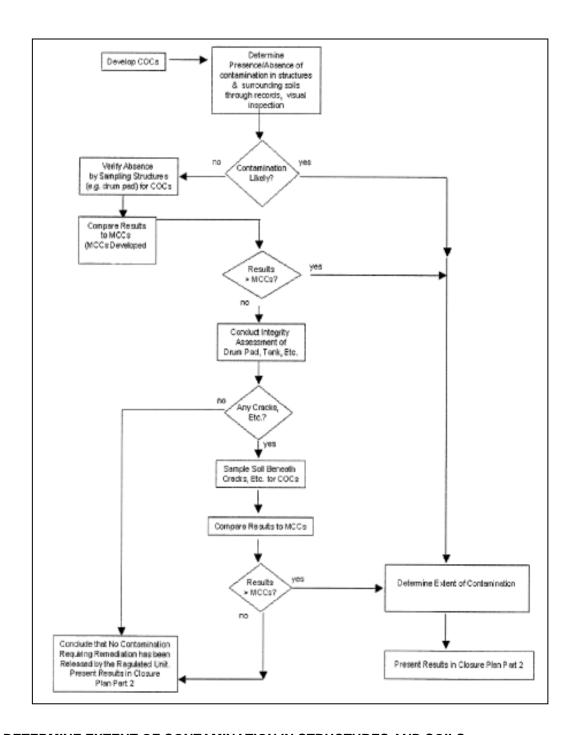
The following flow chart will be used to guide the project:

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#### D. **DETERMINE EXTENT OF CONTAMINATION IN STRUCTURES AND SOILS**

Shaw will determine the vertical and horizontal extent of soil impact (if any) using the CPP 1 Guidance Document.

Shaw will present the results of CPP 1 (and the next work scope) in a combination plan (if applicable) titled Closure Plan Parts 2 & 3 for CTDEP's review and approval. This document will also provide a more

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complete discussion of the method and results of concrete chip sampling and soil sampling proposed above. Then, public notice activities will be completed by CTDEP with assistance from Shaw. If you have any questions regarding this addendum letter or any other site matter, please do not hesitate to call us.

Sincerely,

Shaw Environmental, Inc.

Andrew D. Walker, LEP, LSP Project Manager

cc Tim Sisk, Montville Power LLC Ed Keith, NRG (electronic) Juan Perez, USEPA (electronic) David Ringquist, CTDEP

Attachments:

Figures: Figure 1 - Site Plan

Figure 2 - CSA Map

Attachment 1 - CSA Photos

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# **FIGURES**

Site Plan – Figure 1 CSA Plan – Figure 2



# Field Activity Daily Log

DATE	3	25	09
NO.			·
SHEET	1	OF	1

		eld Activity Daily Log	NO.
	ronmental & Infrastructure, Inc.		SHEET   OF
Project Name:	IRG Montville CSA Inspect	Project No. 100	9644004
Field Activity Subject:	CSA Inspect	10N	•
Description of Daily Activities	s and Events:		
	FTO	SURE 2	N
	1 + 0	JUKE O	
	C	SA	V
Pipes - HALL			1111 - 20005
	11		O Of throughwa
hrough bob	Sc		A 1002
ipes.	Sourceninger	1,111111	1 100 = 2
mounted	on concrete	Stavis up	Vertical 1 High
O COLL	Spall(chipped) On Concrete Floor	Janding ~8" High Concrete Pad	COMMINI
O Ceiling		- Concrete Had	Small Crack
		L Suspended removable	arate
			)
	& Floor Drain	16" Wide	
		~8" High (0	oncrete
		Bern	1
	WINT D.	6" wide ~8" High a Bern	
	ww i rumpi	ing Equipment	
	<u>'</u>	J   F	

VISITORS ON SITE:	CHANGES FROM PLANS AND SPECIFICATIONS AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:
WEATHER CONDITIONS:	IMPORTANT TELEPHONE CALLS:
SHAW E & I PERSONNEL ON SITE:	
SIGNATURE:	DATE:

1"=5Fee+

# Attachment 1

**CSA Photos** 

# Shaw Environmental and Infrastructure, Inc. Photographic Record

Client: NRG Energy Project Number: 1009644004

Site Name: Montville Power LLC Site Location: Montville, Connecticut

Photographer:

Joe Pickard

Date:

March 25, 2009

**Direction:** 

Southwest

Comments:

Piping through southwest wall of CSA and mineral stain on floor

Photographer:

Joe Pickard

Date:

March 25, 2009

Direction:

West / Northwest

Comments:

Piping along west wall of CSA and mineral stain on floor



## Milford, Connecticut 06460

# Shaw Environmental and Infrastructure, Inc. Photographic Record

Client: NRG Energy Project Number: 1009644004

Site Name: Montville Power LLC Site Location: Montville, Connecticut

Photographer:

Joe Pickard

Date:

March 25, 2009

Direction:

North of CSA

Comments:

Berm north side of CSA (CSA is to the left)

Photographer:

Joe Pickard

Date:

March 25, 2009

Direction:

Northwest

Comments:

Berm Wall Joint (CSA is to the top of photograph)



### **Shaw Environmental and Infrastructure, Inc. Photographic Record**

**NRG Energy** Client: **Project Number:** 1009644004

Montville Power LLC Site Name:

Photographer:

Joe Pickard

Date:

March 25, 2009

Direction:

Southeast

Comments:

**Chipped Concrete** Floor Southeast Area of CSA

Photographer:

Joe Pickard

Date:

March 25, 2009

Direction:

East

Comments:

Capped Pipe on East Side of CSA

